

National Nuclear Security Administration National Security Campus

Kansas City Plant

Storm Water Pollution Prevention Plan

November 2012

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ACRONYMS, INITIALISMS, AND ABBREVIATIONS

AST	-- Aboveground Storage Tank
BMP	-- Best Management Practice
CFR	-- Code of Federal Regulations
CPZ	-- Center Point Zimmer
CUP	-- Central Utility Plant
DOE	-- Department of Energy
EPA	-- U. S. Environmental Protection Agency
FM&T	-- Federal Manufacturing & Technologies
FPS	-- fire protection system
ft	-- feet
gal	-- gallons
gpm	-- gallon per minute
GSA	-- General Services Administration
HVAC	-- Heating Ventilation Air Conditioning
ISO	-- International Standards Organization
IWPF	-- Industrial Wastewater Pretreatment Facility
KCP	-- Kansas City Plant
L	-- liter
µg	-- microgram
mg	-- milligrams
mgd	-- million gallons per-day
MDNR	-- Missouri Department of Natural Resources
NFPA	-- National Fire Protection Association
NNSA	-- National Nuclear Security Administration
NPDES	-- National Pollutant Discharge Elimination System
PHA	-- Preliminary Hazard Assessment
PM	-- preventive maintenance

RCRA	-- Resource Conservation and Recovery Act
SARA	-- Superfund Amendments and Reauthorization Act
SPCC	-- Spill Prevention Control & Countermeasures
SWPPP	-- Storm Water Pollution Prevention Plan
5S	-- sort, store, sweep, standardize, sustain
TPQ	-- threshold planning quantities
TRC	-- Total Residual Chlorine
WIT	-- waste identification table

Purpose and Objectives

Stormwater discharges from the U.S Department of Energy (DOE) National Nuclear Security Administration's (NNSA) National Security Campus Kansas City Plant (KCP) are regulated in the form of a stormwater No Exposure Certification. State regulations at 10 CSR 20-6.200 (1)(B)16 exclude industrial facilities that meet the requirements of 10 CSR 20-6.200 (1)(B)16.A.(I) through B.(III) from requirements that would otherwise require the facility to obtain a permit. In order to ensure activities at the KCP are in continuous compliance with the above requirements a Stormwater Pollution Prevention Plan (SWPPP) has been developed. The objectives of the SWPPP Plan are:

1. Document requirements that will ensure ongoing compliance with a No Exposure operating envelope.
2. Facilitate planning and organization in support of the SWPPP.
3. Identify routine actions to prevent the release of pollutants to receiving streams.
4. Periodically evaluate and facilitate revision of operating practices to prevent the release of pollutants to receiving streams.

I. FACILITY INFORMATION AND CONTACT INFORMATION

A. Facility Information

The 177 acre KCP is located approximately 20 miles south of downtown Kansas City, Missouri, within the incorporated city limits. The facility has been designed and built to meet the requirements necessary to comply with a stormwater No Exposure certification.

Name of Facility: NNSA National Security Campus Kansas City Plant

Address: 14500 Botts Road

City: Kansas City **State:** Missouri **ZIP Code:** 64147

B. Contact Information / Responsible Parties / Approval

Facility Owner

Name: Center Point Zimmer (CPZ)

Address: 14500 Botts Road

City, State, ZIP Code: Kansas City, MO 64147

CPZ Facility Manager: Jim Cross

Telephone Number: (816) 218-6310

email address: jcross@centerpoint-prop.com

original signed by

Jim Cross

date

Facility Operator

Name: NNSA / Honeywell FM&T

Address: 14500 Botts Road

City, State, ZIP Code: Kansas City, MO 64147

NNSA Environmental Manager: David M. Caughey

Telephone Number: (816) 997-3449

email address: dcaughey@kcp.com

original signed by

Dave Caughey

date

The KCP is owned by Center Point Zimmer (CPZ) and leased by the General Services Administration (GSA) who in turn leases the facility to the NNSA. CPZ operates and maintains the facility infrastructure (e.g., HVAC systems, cafeteria, grounds keeping). NNSA owns the manufacturing equipment and related supplies. The NNSA has contracted with Honeywell FM&T to manage and operate the manufacturing processes and related support functions (e.g., waste management functions, equipment maintenance) at the facility. A number of manufacturing processes ranging from micro-electronics to heavy machining to chemical processing are located within a high security environment.

C. Stormwater Pollution Prevention Team

The pollution prevention team shall consist of the following representatives:

- ❖ NNSA Kansas City Site Office Environmental Manager*
- ❖ CPZ Environmental Program Representative*
- ❖ FM&T Facilities / HS&E Director*
- ❖ FM&T Health, Safety and Environment Operations Manager
- ❖ FM&T Waste Management Representative
- ❖ FM&T Environmental Compliance Department staff responsible for SPCC Plan and stormwater permit
- ❖ FM&T Facilities Engineer

*Management level of pollution prevention team.

The management level of the pollution prevention team shall be responsible for review, approval, and implementation oversight of the SWPPP. The management level of the team will ensure all divisions of the KCP abide by the identified BMPs.

The remaining team members are considered as the working group responsible for assessment of potential pollutant run-off and the identification and implementation of SWPPP elements. The working group is responsible for worker training, site assessment, development of BMPs, inspections related to identified BMPs, and review and evaluation of identified BMPs.

D. Facility Activities

The KCP is considered a light manufacturing facility. The KCP produces non-nuclear components for nuclear weapons. Large scale production of a single product line does not occur. Rather, small quantities of a wide range of products are produced at the facility in a secure manufacturing environment. Production operations include; machining, plating, painting, polymer production, plastics manufacturing, electronic

manufacturing, welding, and numerous labs and test equipment in support of the above. Non-manufacturing activities include, waste management, chemical storage, shipping / receiving, utility plant operations, industrial wastewater treatment, cafeteria operations and routine building and grounds maintenance.

E. Facility Map

Figure 1 depicts the general location of the KCP and Figure 2 provides a detailed site map. Figure 3 provides a site contour map and depicts major storm drain pipe segments.

II. POTENTIAL POLLUTANT SOURCES

A. Industrial Activity / Potential Spills

The KCP has been designed and built to comply with EPA and MDNR No Exposure Certification requirements. All manufacturing related activities are housed in buildings. Support activities located in yard areas of the facility pose the greatest potential for exposure of materials that could become entrained in stormwater discharges. Material storage areas are provided with appropriate control features to prevent inadvertent discharges and spills to the storm sewer system. Site operations that pose the greatest potential for spills or leaks are identified in Table 1. The greatest potential for possibly impacting the storm sewer is associated with movement of materials that are not properly protected or an accident that involves damage to a container.

B. Non-Stormwater Discharge Documentation

The KCP has been designed and constructed to facilitate a No Exposure Certification. Only uncontaminated rain event run-off, and discharges associated with HVAC condensate and limited fire protection system test flows are routed to the storm sewer system. A configuration management control system that addresses any subsequent changes to the wastewater operating envelope will ensure new or revised discharges are routed to the proper drain system. This system requires the completion of a Drain Connection / Discharge Approval form that is reviewed and approved by CPZ, Utilities Engineering and Environmental Compliance personnel prior to modifications to plant drains systems. Annual SWPPP effectiveness reviews will include an evaluation step to identify potential non-stormwater discharges.

Table 1
Industrial Activity

Industrial Activity	Control Feature	Regulatory driver
Above ground storage tanks		
↳ Backup boiler fuel oil	containment	40 CFR 112
↳ Emergency generator fuel tanks	containment	40 CFR 112
↳ Industrial wastewater tanks	containment	SWPPP
↳ Fire protection diesel pump fuel tank	containment	40 CFR 112
↳ Waste machining coolant	containment	SWPPP
↳ Central cooling equip glycol tanks	low pressure shut off	SWPPP
↳ Fuel transfer operations	transfer protocols	40 CFR 112
↳ Oil filled electrical transformers secondary containment (> 55 gal oil)	Controls per 40 CFR 112	40 CFR 112
Waste management 90 day storage areas (separate developer and tenant areas)	containment	40 CFR 262
Lidded dumpsters	BMP	SWPPP
Other outdoor liquid chemical storage tanks	containment	SWPPP
Scrap metal lot north of Bldg 3 – 3,600ft ²	covered w/ bermed lot	SWPPP
Covered Ware Yard (north of Bldg 4) for Nuclear grade steel storage	covered w/ bermed lot	40 CFR 122.26(g)
Covered Chemical Storage (attached to Ware Yard east)	covered w/ bermed lot	40 CFR 122.26(g)
Truck docks at building interface	equipped with spill sump	40 CFR 122.26(g)
Outdoor truck dock (Waste Mgt)	equipped with roof	40 CFR 122.26(g)
Material movement	BMP	40 CFR 122.26(g)

III. STORMWATER CONTROL MEASURES

The KCP is configured such that significant materials are not exposed during storage as these materials are stored in buildings with designed containment structures or, in the case of bulk fuels, the tank systems are located inside secondary containment structures. Significant materials are transferred in properly sealed containers and are not exposed during on-site transportation from out buildings into the main building or during off-loading operations. Table 1 lists significant areas of industrial activity that could, if not otherwise properly managed and operated, impact site storm water run-off. Figure 2 also depicts the location for the activities listed in Table 1. Figures 3.a - d provide details related to the storm drainage system of piping and open ditches and retention ponds. Storm water flows are routed to one of several on-site detention ponds prior to discharging off-site. The detention ponds would facilitate an

additional measure of containment if a spill event were to overwhelm the engineered containment structure or initial response measures.

A. Covered Wareyard

The Covered Ware Yard (Figure 2 and 6) houses chemical storage pods with integral containment. Chemicals are stored by type and compatibility. The Ware Yard is roofed and equipped with a berm to ensure any spills within the lot are routed to a spill containment sump. Any spills would be immediately addressed by the on-site spill response team. All spill containment sumps (e.g., Chemical Stores, fuel storage areas, waste management areas), are inspected on a monthly basis by Environmental Compliance staff and the results documented in a memo to file.

B. Waste Management Activities

The KCP operates as a 90 day storage area large quantity generator under RCRA. Hazardous waste storage areas are located inside buildings and equipped with containment structures. Management of hazardous wastes at the KCP is facilitated with a container bar code inventory system. The bar code system tracks the department, date issued, waste type, and location of waste containers. All RCRA 90 day storage areas are inspected on a weekly basis and the results documented. Any deficiencies are immediately addressed.

Scrap metal is processed at the covered storage lot immediately north of Building 3 (Figure 2 and 7). Several open top roll off containers which are used to accumulate and eventually ship scrap metal are located on this lot. Metal chips contaminated with coolant used during machining operations will also be handled on this lot. This lot is equipped with a metal roof and the floor is sloped to a series of drains that are in turn routed to an oil water separator located in a subsurface vault south of the lot that discharges the treated water to the sanitary sewer.

The IWPF treats and discharges metal finishing wastewater to the Kansas City, Missouri sanitary sewer under a pretreatment discharge permit issued by the city and regulated under 40 CFR 433. Dilute wastewater is delivered to the IWPF through an overhead piping system. Concentrated spent solutions are delivered to the Waste Management department for off-site disposal. The room where the IWPF is located is equipped with adequate secondary containment.

Enclosed roll off boxes are also staged at the Building 1 dock. These roll off boxes will store normal office type wastes and cafeteria wastes. Cafeteria grease is separately containerized and is not managed in these roll off boxes.

C. Salt Storage

During winter months salt is stored for parking lot and sidewalk application during snow and ice events. Salt stockpiles are stored in a metal shipping van and covered with tarps when not in use and are routinely checked to ensure the stockpiles remain covered.

D. Best Management Practices

BMPs are measures used to prevent or mitigate pollution from any type of activity. BMPs are a very broad class of measures and may include processes, procedures, schedules of activities, prohibition on practices, and other management practices to prevent or reduce water pollution. The following sections describe the “baseline BMPs” that are implemented on a site wide basis.

1. Good Housekeeping

Good housekeeping practices are designed to maintain a clean and orderly work environment. Prompt management of trash, debris and unwanted / unused items also ensures safety hazards are removed from the work area. Organizing equipment, tools, and materials in work areas reduces the likelihood of an associated accidental discharge of material to the storm sewer. The KCP has implemented what is known as the “weekly walks” that includes a housekeeping review based on the 5S program (sort, store, sweep, standardize, and sustain).

- ❖ Sort: Organize the area by determining what to keep and what to get rid of
- ❖ Store: Decide what goes where
- ❖ Sweep: Visually and physically control the work area
- ❖ Standardize: Develop guidelines to maintain improvements
- ❖ Sustain: Do the first four S’s on a regular basis

First level managers conduct weekly walks that include a 5S review where any two of the 5S components are reviewed each week.

2. Preventive Maintenance

Preventive maintenance (PM) involves the regular inspection and testing of plant equipment and operational systems. The pollution prevention team identified in Section I.C., above, shall periodically

evaluate existing preventive maintenance procedures and recommend changes in consideration of upkeep and maintenance of storm water system. PM activities involve the regular inspection and testing of plant equipment and operational systems. These inspections should uncover conditions such as cracks or slow leaks which could cause breakdowns or failures that result in discharges of chemicals to storm sewer and surface waters. At a minimum, PM procedures at the KCP include the following elements:

- ❖ Identification of equipment, systems, and facility areas that should be inspected
- ❖ Schedule for periodic inspections or tests of these equipment and systems
- ❖ Equipment repair or replacement
- ❖ Maintenance of complete records on inspections equipment and systems.

Routine PM schedules at the KCP are managed by the Facilities Management Division using the MAXIMO system. The MAXIMO system generates, schedules and tracks work orders, including routine PM activities and generates a record of the activity. Routine PMs are performed on systems that could potentially impact the storm sewer system and include: pipes, pumps, storage tanks, pressure vessels, valves, material handling equipment, utility plant equipment and operations, roof stacks / vents and other miscellaneous items. “Environmentally significant equipment” is addressed under equipment maintenance procedures in Command Media and related maintenance operations procedures. A list of “environmental significant equipment” and associated PMs is maintained in the Maximo system. The equipment maintenance procedure includes a step requiring the Environmental Compliance department to notify Maintenance Administration of equipment and systems to be added to the list of “Environmentally Significant or compliance driven equipment.

3. Construction Activities

In general, KCP activities do not have the potential to generate significant sediment loading in storm water run-off. Typically, if excavations are performed, the area is very small and is associated with repairs or tie-ins to buried utilities. The stockpiled material must be placed on plastic sheeting, tarped and run-on / run-off controls established. Occasionally a larger area of soil is exposed during reconstruction of sidewalks or parking lots. These jobs require the appropriate run-off controls, such as silt fences and hay bales, to minimize sediment loading to the storm sewer system.

4. Material Loading / Unloading BMP

Truck trailer receiving docks at the KCP are configured such that materials are handled within the building. Delivery vehicles entering the KCP are screened for security purposes. Security associates would note any obvious leaks when cargo bay doors are opened during gate entry. Shipping and

receiving dock doors are equipped with a large weather strip that forms a barrier between the cargo doors and the dock doors minimizing any rain event run-off that may come in contact with the materials being loaded or unloaded. Docks are configured with a ground level trench drain that is routed to a sump equipped with a float actuated pump that would, during normal operations, in turn discharge rain event water entering the trench drain. In the event of a spill the pump can be disabled with an emergency stop located immediately inside the truck dock. This set up would allow spills at the dock interface to be captured in the wet well associated with the truck dock trench drain.

5. Liquid Storage in Above Ground Tanks BMP

Liquid storage in above ground tanks is associated with fuel tanks, spent machine coolant and liquid waste storage and processing tanks at the Industrial Wastewater Pretreatment Facility (IWPF) (see Figure 2).

Fuel Tanks

The Central Utility Plant (CUP) back-up fuel oil storage consists of two double walled 8,000 gal #2 fuel oil storage tanks with interstitial monitor housed within a concrete containment basin. In addition, there are two #2 fuel oil double walled storage tanks that provide fuel to an emergency generator and an emergency fire pump that contain 336 gallons and 356 gallons, respectively. The above fuel tanks are regulated under 40 CFR 112 and related SPCC Plan (Terracon 2012).

Other Storage Tanks

Dilute industrial wastewater is stored in two 30,000 gallon above ground storage tanks located within secondary containment off the southwest corner of the CUP (Figure 9). Untreated process wastewater is stored in these tanks prior to treatment. Any water accumulating inside the containment areas is routed to the IWPF for treatment. The IWPF is permitted under 40 CFR 433, Metal Finishing Pretreatment Category, to discharge to the Kansas City, Missouri sanitary sewer. Dilute industrial wastewater is delivered to the IWPF in overhead piping. Various sumps (all industrial wastewater sumps are located inside buildings) that are tied into the dilute piping system are equipped with high level alarms. The IWPF is staffed during normal business hours. During off shifts and weekends a number of alarms are in place which are tied to an auto dialer system. In the event of an alarm condition (e.g., high tank level) the alarm causes the auto dialer to contact the on-call IWPF operator. The on-call IWPF operator must then proceed to the IWPF and address the alarm condition.

Other outdoor above ground storage tanks include the spent coolant storage tank (Figure 2 and 10). Spent machining coolant is stored at this location prior to shipment for off-site disposal. The tanker truck used to make shipments of spent coolant will be located in the truck containment area (Figures and 5) located immediately west of this tank during transfer operations.

6. Waste Management BMP

The KCP operates as a 90 day storage area large quantity generator under RCRA. Hazardous waste storage areas are equipped with containment structures and are located inside buildings. Management of hazardous wastes at the KCP is facilitated with a container bar code inventory system. The bar code system tracks the department, date issued, waste type, and location of waste containers. All RCRA 90 day storage areas are inspected on a weekly basis and the results documented. Any deficiencies are immediately addressed.

The Waste Management department maintains an appropriately equipped dedicated spill response vehicle. Waste containers are shipped within the plant using fork trucks or chore boys. Operators have been trained on proper spill reporting measures and carry two-way radios that can be used to facilitate a rapid response. The general plant population has been trained to use the in-plant spill hot-line number by dialing extension 7745 (SPIL). During off-shift hours this phone number rolls over to the Patrol console which is manned 24 hours a day, 365 days a year. KCP associates responsible for spill and emergency response carry pagers for continuous response capability.

The KCP is ISO 14001 certified and has numerous written work instructions that detail waste management operations. As an ISO 14001 certified facility the KCP has formal procedures in place to identify significant environmental aspects and, therefore, performs a formal evaluation of facility processes to identify candidate processes for waste reduction opportunities.

7. Outside Storage BMP

There are no outside manufacturing operations at the KCP. There are no outside manufacturing product or waste storage areas that are not equipped with secondary containment.

8. Fire Protection BMP

The Fire Protection System (FPS) uses city drinking water as a supply. City drinking water typically contains 2 – 2.5 mg/L of total residual chlorine (TRC). However, TRC degrades with residence time in FPS piping which is normally flowed only during testing or maintenance activities that require partial

drainage of a segment of the FPS. National Fire Protection Association (NFPA) guidelines require periodic testing of systems. In compliance with NFPA guidelines the following test flows are routinely conducted:

- ❖ **Flow or Inspector Tests** of sprinkler systems are conducted on a monthly basis.
- ❖ **Main drain tests** are conducted on an annual basis.
- ❖ **Hose reels** are tested annually.
- ❖ **Fire hydrants** are tested annually. NFPA guidelines require the use of a clamp on dechlorination device to dechlorinate the larger volume of flow generated during hydrant tests.
- ❖ **System impairments** result from construction / maintenance activities that require portions of the FPS to be drained.
- ❖ **Emergency Diesel Pump** tests are conducted on a weekly basis.
- ❖ **Electric Jockey Pump** tests are conducted on a monthly basis.

Fire Protection Run-off Containment has been installed in High Hazard areas of the facility that require containment of fire fight water. Operations in these areas of the facility have the potential for combustible fire fight run-off water and have been constructed with containment structures. These containment structures consist of containment within the building for the operation in question that routes fire protection run-off to a below ground sump outside the building. These systems effectively serve as spill containment for the operations and, in the event of a fire, are capable of containing fire protection water for a given fire fight event.

E. Spill Prevention / Response

The Spill Control Plan² has been prepared in accordance with 40 CFR 112 and 40 CFR 264.52(b) and meets the requirement of maintaining a Spill Prevention Control and Countermeasures (SPCC) Plan and Contingency Plan required by the respective regulations. Two separate SPCC Plans are maintained for the KCP. CPZ has developed and implemented a SPCC Plan for operations under their control (e.g., CUP fuel oil storage tanks, emergency generator fuel tank, emergency fire pump fuel tank, and as necessary, oil filled electrical transformers). Likewise, the NNSA has developed and implemented a SPCC Plan that addresses equipment under its control that stores / uses greater than 55 gallons of oil. The majority of items under NNSA control that are addressed under the SPCC regulations are various pieces of production equipment that utilize oil in hydraulics or machining. The Spill Control Plan serves as the umbrella document for site response to spill events and describes prevention systems and response

actions that can be taken to protect personnel and minimize impact to the environment and outlines spill notification and initial response procedures.

The majority of the spills of hazardous substances are associated with routine operations at the KCP and range in size from a small leak on a piece of equipment to a release of a few gallons. These spills are cleaned up quickly and normally pose no threat to human health or the environment. In the event of a larger incident, the Emergency Plan will be activated and the incident will be under the control of the Emergency Response Organization as outlined in the KCP Emergency Plan³. The KCP has installed concrete containment structures for outside above ground storage tanks. A number of other control features are designed into the facility including bermed and or covered storage lots where material handling and storage activities occur. A listing of all containment and diversion structures is provided in the Spill Control Plan².

The KCP maintains a reliable radio communications system that would facilitate timely notification of any spills at the facility. In addition, the KCP has emergency and spill hotline numbers which are staffed 24 hours a day. The spill hotline number facilitates spill response by trained on-site associates. The KCP also works closely with the local Fire Department and Hazardous Material Response Team and has formalized procedures in place in the site's Emergency Plan³ to coordinate an emergency response with these outside agencies, should the need arise. In addition, the KCP has conducted a Hazard Assessment⁴ which evaluates the use and storage of hazardous chemicals at the KCP above Superfund Amendments and Reauthorization Act (SARA) threshold planning quantities (TPQ). The storage conditions, transportation, use, and disposition of chemicals were evaluated to determine the worst case credible events. The KCP's Emergency Response Organization coordinates with local offsite response organizations in the event of a spill or release beyond the capability of on site resources.

1. Spill Control Plan

The KCP's Spill Control Plan (DOE 2012b) is also identified as a BMP general practice that reduces the likelihood of pollutants reaching the storm sewer system. Areas where significant materials are unloaded, stored, or processed, are addressed by the KCP's Spill Control Plan. Fuel and oil storage areas are identified. Waste storage and unloading areas, IWPF configuration, major chemical handling and storage areas, and storm drainage basins and major storm sewer lines are identified in the Spill Control Plan. The spill response plan describes the team responsible for implementing spill plan requirements, safety measures, notification requirements / procedures, containment and diversion structures, storage tank locations, facility drainage areas, inspections, security and training.

2. Employee Training

The goal of the employee training program is to inform associates at all levels of responsibility to the appropriate level. Associates will be trained, as appropriate, on general BMPs including spill prevention, housekeeping, material management practices and specific BMPs discussed under Section IV.B., below. As discussed under Section III.D.1. housekeeping is addressed by the 5S program and the appropriate individuals trained to implement this program. Spill prevention and response is coordinated under the KCP's Spill Control Plan² and the Emergency Plan³. Annual training (class room and on-line) is provided to employees with responsibilities related to implementation of requirements outlined in the Spill Control Plan. Drills are periodically conducted to exercise and evaluate spill response capabilities at the KCP. Lessons learned from the evaluations are used to implement improvements associated with spill response capabilities. All associates at the KCP have been trained to report spills by contacting the SPIL (x7745) hotline.

IV. EVALUATION

A. No Exposure

No exposure means all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt and/or runoff. Industrial materials and activities include, but are not limited to, material handling equipment or activities; industrial machinery; raw materials, intermediate products, by-products, and final products; or waste products. Material handling activities include storage, loading and unloading, transportation or conveyance, of any raw material, intermediate product, by-product, final product or waste product.

Many final products which are meant to be used outdoors (e.g., automobiles) pose little risk of storm water contamination, i.e., the products cannot be mobilized by precipitation or runoff, and are thus exempt from the requirement that these products be sheltered to qualify for no exposure. Similarly, the containers, racks and other transport platforms (e.g., wooden pallets) used for the storage or conveyance of these final products can also be stored outside, providing the containers, racks and platforms are pollutant-free. Storm-resistant shelters include completely roofed and walled buildings or structures, as well as structures with only a top cover but no side coverings, provided material under the structure is not otherwise subject to any run-on and subsequent runoff of storm water. EPA acknowledges there are circumstances where permanent, uninterrupted sheltering of industrial activities or materials is not possible. Under such conditions:

- ❖ Materials and activities may be sheltered with temporary covers (e.g., tarpaulins) until permanent enclosure can be achieved.
- ❖ The no exposure provision does not specify every such situation, but NPDES permitting authorities can address this issue on a case-by-case basis, i.e., determine if the temporary covers will meet the requirements of this section.
- ❖ In general, EPA recommends that temporary sheltering of industrial materials and activities only be allowed during facility renovation or construction.

Industrial Materials / Activities That Do Not Require a Storm Resistant Shelter

While the intent of the no exposure exclusion is to promote a condition of permanent no exposure, a storm-resistant shelter is not required for the following industrial materials and activities:

Drums, Barrels, Tanks and Similar Containers

Drums, barrels, tanks and similar containers that are sealed (“sealed” means banded or otherwise secured and *without operational taps or valves*), are not exposed provided those containers are not deteriorated and do not leak. Unless the drums, barrels, etc., are opened while outdoors, or are deteriorated or leak, they will likely not constitute a risk of contaminating storm water runoff. Consider the following in making your no exposure determination:

- ❖ Containers can only be stored outdoors; any addition or withdrawal of material to / from containers while outdoors will not allow you to certify no exposure.
- ❖ Simply moving containers while outside does not create exposure.
- ❖ Inspect all outdoor containers to ensure they are not open, deteriorated or leaking.
 - ✓ EPA recommends that a designated individual regularly conduct these inspections.
 - ✓ Any time external containers are open, deteriorated or leaking, they must immediately be closed, replaced or sheltered.
 - ✓ Containers, racks and other transport platforms (e.g., wooden pallets) used with the drums, barrels, etc., can be stored outside providing they are contaminant-free.

Above Ground Storage Tanks (ASTs).

In addition to generally being considered not exposed, ASTs may also be exempt from the prohibition against adding or withdrawing material to / from external containers. ASTs typically utilize transfer valves to dispense materials which support facility operations (e.g., heating oil, propane, butane, chemical feedstocks) or fuel for delivery vehicles (gasoline, diesel, compressed natural gas). For ASTs to be operational and qualify for no exposure:

- ❖ They must be physically separated from and not associated with vehicle maintenance operations.
- ❖ There must be no piping, pumps or other equipment leaking contaminants that could contact storm water.
- ❖ EPA recommends, wherever feasible, that ASTs be surrounded by some type of physical containment (e.g., an impervious dike, berm or concrete retaining structure) to prevent runoff in the event of a structural failure or leaking transfer valve. *Note: any resulting unpermitted discharge would violate the CWA.*

Lidded Dumpsters.

Lidded dumpsters containing waste materials, providing the containers are completely covered and nothing can drain out holes in the bottom, or is lost in loading onto a garbage truck. Industrial refuse and trash that is stored uncovered, however, is considered exposed.

Adequately maintained vehicles,

Adequately maintained vehicles such as trucks, automobiles, forklifts, trailers or other general purpose vehicles found onsite—but not industrial machinery—which are not leaking or are otherwise a potential source of contaminants.

- ❖ Vehicles passing between buildings will likely come into contact with precipitation at some time, but so long as they are adequately maintained they will not cause a condition of exposure. Similarly, non-leaking vehicles awaiting maintenance at vehicle maintenance facilities are not considered exposed.
- ❖ The mere conveyance between buildings of materials / products that would otherwise not be allowed to be stored outdoors, does not create a condition of exposure, provided the materials / products are adequately protected from precipitation and could not be released as a result of a leak or spill.

Other Potential Sources of Contaminants

Particulate Emissions From Roof Stacks and/or Vents.

As stated in the Phase II regulation, particulate emissions from roof stacks / vents do not cause a condition of exposure, provided they are in compliance with other applicable environmental protection programs (e.g., air quality control programs) and do not cause storm water contamination. Deposits of particles or residuals from roof stacks / vents not otherwise regulated and which could be mobilized by storm water runoff, are considered exposed. Exposure also occurs when, as a result of particulate emissions, pollutants can be seen being “tracked out” or carried on the tires of vehicles.

B. Annual Site Inspection / SWPPP Evaluation

Annually, a comprehensive site inspection shall be conducted and the BMP Plan reviewed to determine overall effectiveness of the plan. Although inspections are conducted in support of the BMP Plan throughout the year by various KCP associates a comprehensive site storm water inspection shall be completed by the Environmental Compliance Department associate responsible for the stormwater program. The following steps shall be completed as a part of the annual BMP inspection:

- ❖ Review the stormwater BMP Plan to identify areas addressed by the plan and inspect these areas to ensure they are adequately addressed by elements of the plan.
- ❖ Verify equipment / areas covered by the plan.
- ❖ Review facility operations over the previous year to determine if additional areas should be added, or if existing areas have been modified so as to require modifications to the BMP Plan.
- ❖ Conduct inspections to determine if storm water pollution prevention measures are accurately identified in the plan and in place and working properly.
- ❖ Document findings using the EPA Annual Reporting Form.
- ❖ Modify the BMP Plan as appropriate.

C. Recordkeeping / Reporting

All spills, regardless of whether an actual release to the environment occurs or not, are documented on a Spill Report Form. All pertinent information associated with the event is recorded and, most importantly, future preventive actions must be identified. The Maximo system (maintenance request / project tracking system) documents various PM inspections and specific projects on a plant wide basis. Annual BMP effectiveness reviews shall be completed and documented.

Spill Report Form

SPILL REPORT

2469 (02/17/97)

Spill Report Number _____

TO BE COMPLETED BY ENVIRONMENTAL OPERATIONS			
Department/Location of Spill			Responsible Associate/Manager
Date of Spill	Time	Shift	Responding Personnel
Describe Incident: _____ _____ _____			
Chemical/Trade Name	Solid <input type="checkbox"/>	Liquid <input type="checkbox"/>	Gas <input type="checkbox"/>
			Quantity Spilled (Released)
Is this Release 10% of a Reportable Quantity? Yes <input type="checkbox"/> No <input type="checkbox"/> EPA RQ _____ Amount Released _____			
Personal Protection (PPE): _____ _____ _____ Level: _____		Notifications: _____ _____ _____	
Action Taken: _____ _____ _____			

TO BE COMPLETED BY RESPONSIBLE DEPARTMENT
Future Preventative Measures: _____ _____ _____ _____

TO BE COMPLETED BY ENVIRONMENTAL COMPLIANCE
Comments: _____ _____ _____
Follow Up On Preventative Measures: Signature: _____ Date: _____

Reviewed by WM _____ Responsible Associate/Manager _____
 Manager, EC _____

References

DOE 2012. *KCP Emergency Planning Hazards Survey*. November 2012. (Draft or latest version)

DOE 2012a. NNSA National Security Campus *KCP Emergency Plan*. November 2012. (Draft or latest version)

DOE 2012b. NNSA National Security Campus Kansas City Plant Spill Control Plan. November 2012. (Draft or latest version)

EPA 2009. *Developing Your Stormwater Pollution Prevention Plan – A guide for industrial Operators*, EPA 833-B-09-002.

Terracon 2012. *Spill Prevention Control and Countermeasures Plan, NNSA National Security Campus*. November 2012. (Draft or latest version)

Note: The above referenced documents noted as draft will be revised during the transition from the existing Bannister Federal Complex to the NNSA National Security Campus. References will be updated during the annual SWPPP review cycle.

FIGURES

Figure 1
General KCP Location

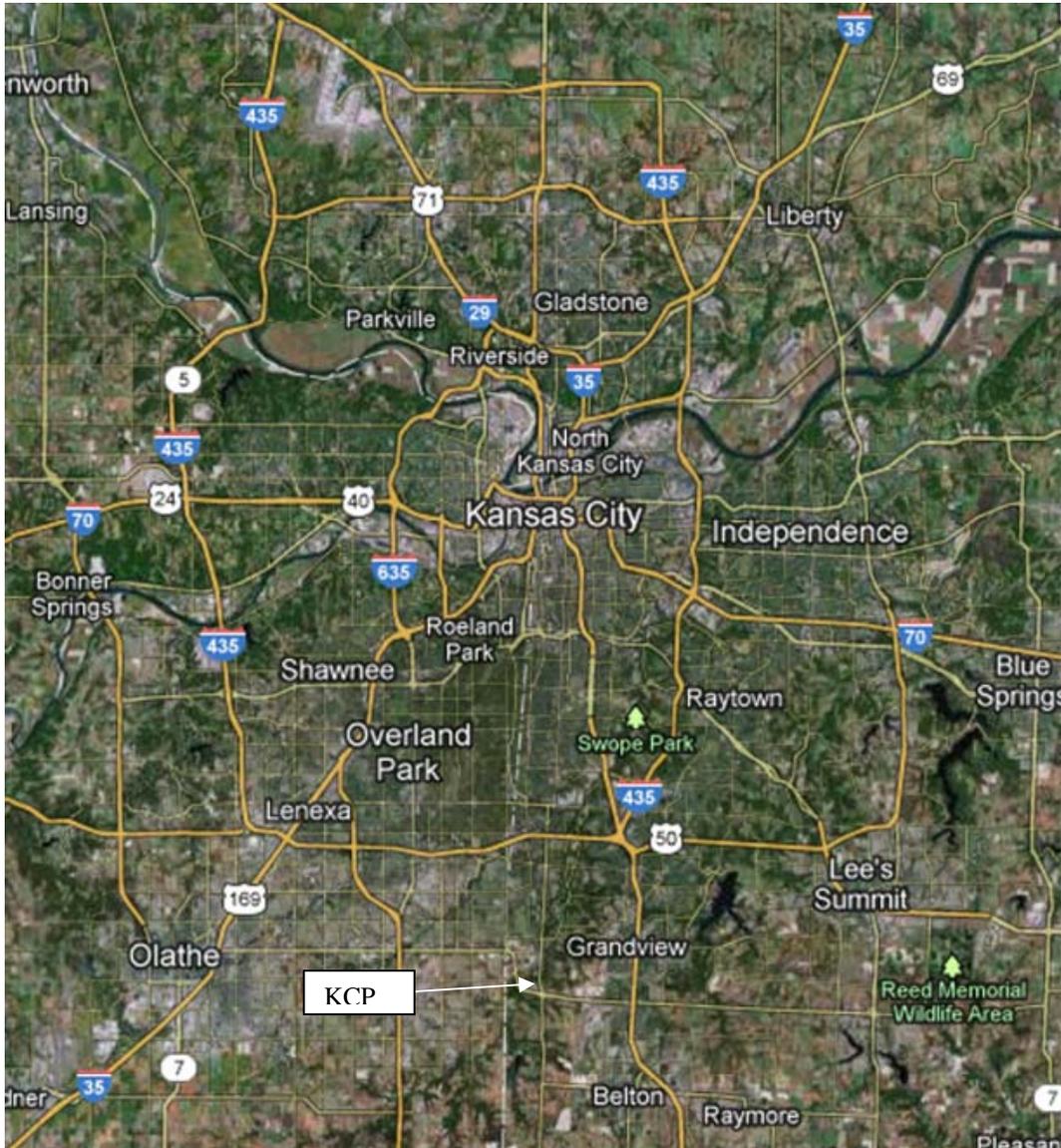
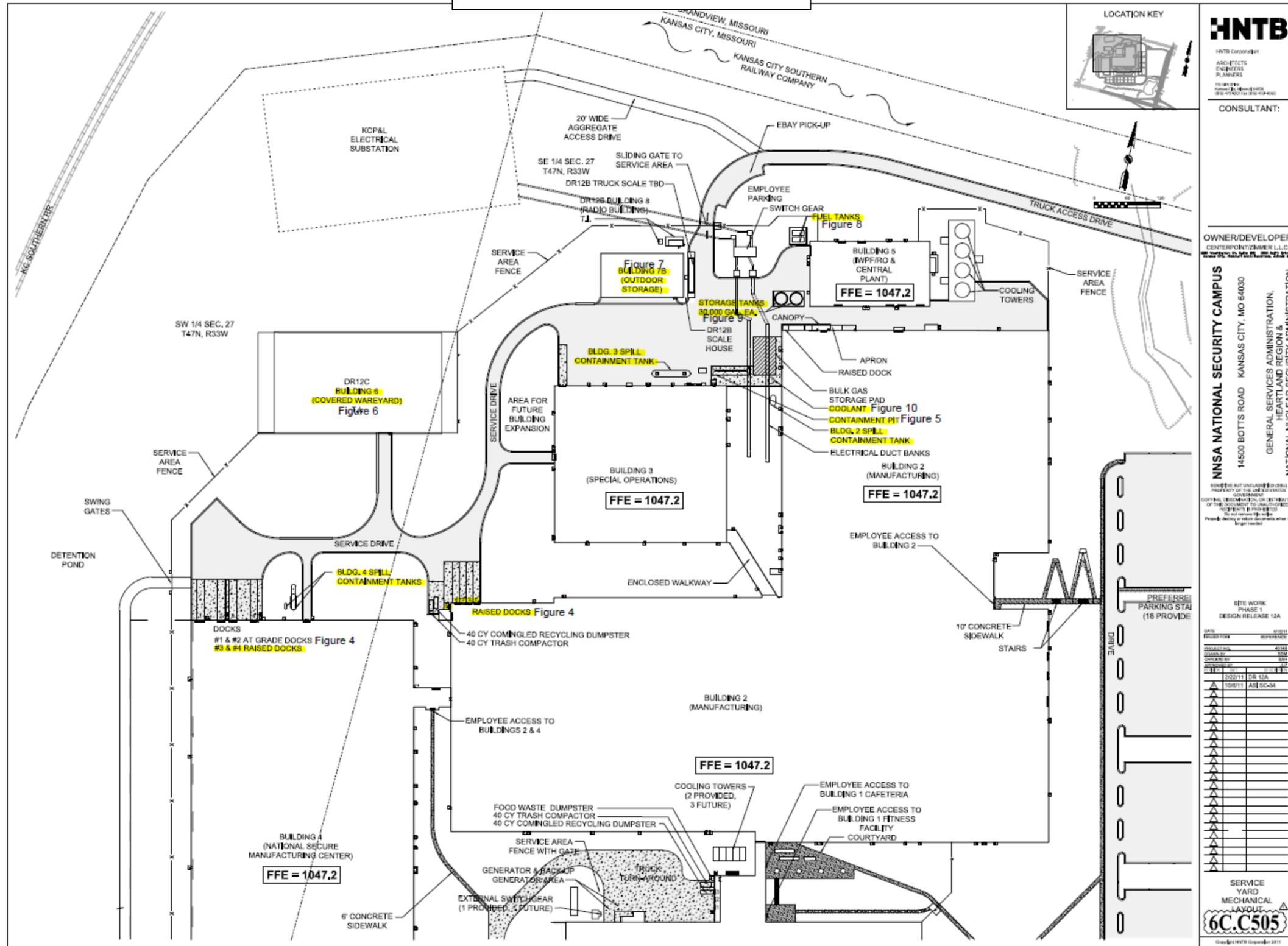


Figure 2 - NNSA National Security Campus



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HNTB Corporation
ARCHITECTS
ENGINEERS
PLANNERS

CONSULTANT:

OWNER/DEVELOPER:
CENTERPOINT/ZIMMER, LLC
14500 BOITTS ROAD KANSAS CITY, MO 64030

NNSA NATIONAL SECURITY CAMPUS
GENERAL SERVICES ADMINISTRATION,
HEARTLAND REGION &
NATIONAL NUCLEAR SECURITY ADMINISTRATION

14500 BOITTS ROAD KANSAS CITY, MO 64030

DATE: 01/2011
DESIGN: 01/2011
CHECKED: 01/2011
APPROVED: 01/2011

2/22/11 DR 12A
12/8/11 ASB BC-34

SERVICE YARD MECHANICAL LAYOUT
6C.C505

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Figure 3 - Facility Surface Contour Map



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 14500 BOITTS ROAD KANSAS CITY, MO 64130
 GENERAL SERVICES ADMINISTRATION, HEARTLAND REGION &
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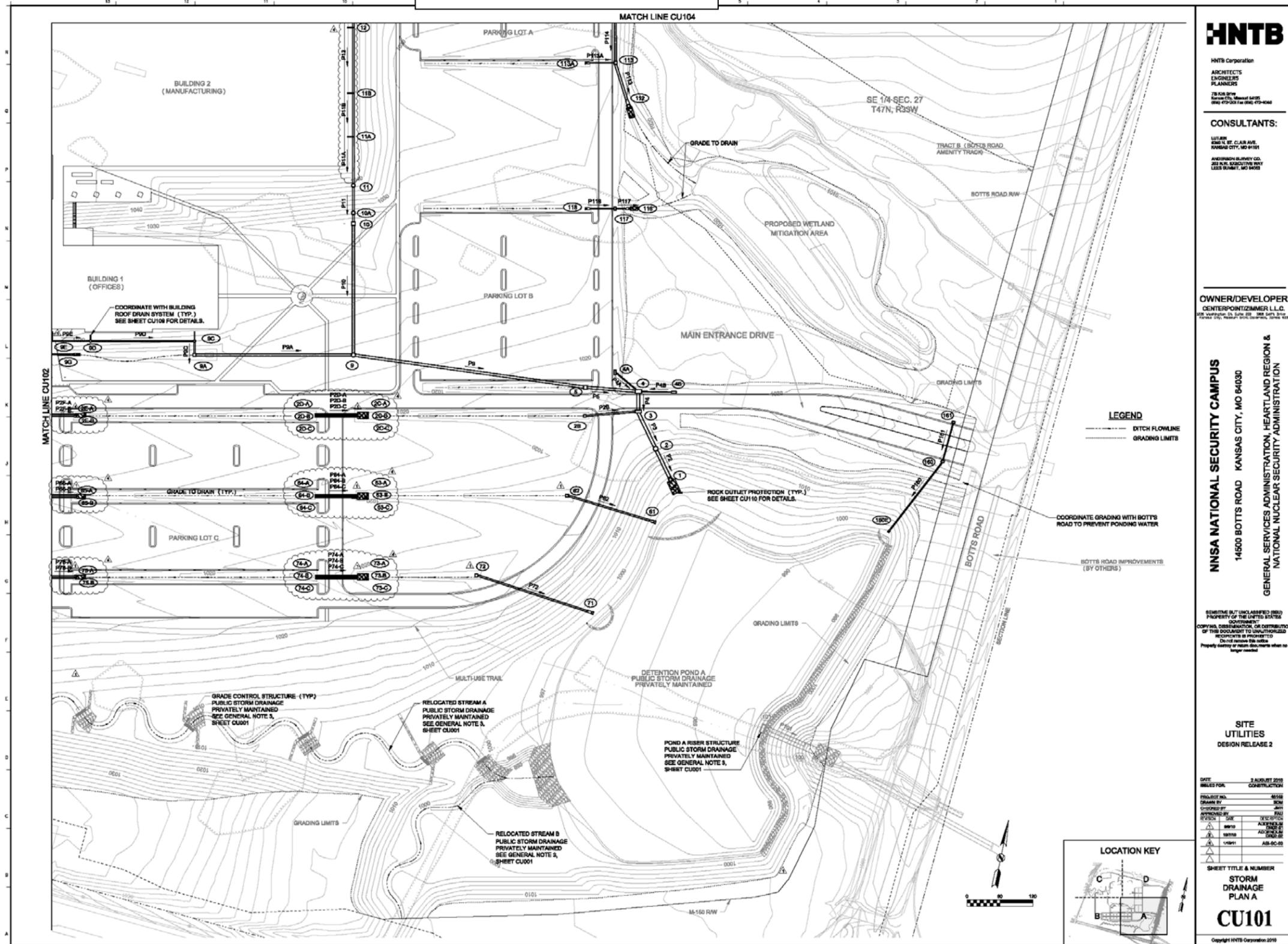
REVIEW SET
 NOT FOR CONSTRUCTION

DATE	08/15/2012
PROJECT NO.	HONEYWELL PROJECT NO. 1118
CONTRACT NO.	1118
SCALE	AS SHOWN
APPROVED BY	[Signature]
REVISION	DATE

SHEET TITLE & NUMBER
STORM SEWER
C103

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Figure 3.a Site Storm Water Drainage



HNTB

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LEES SUMMIT, MO 64082

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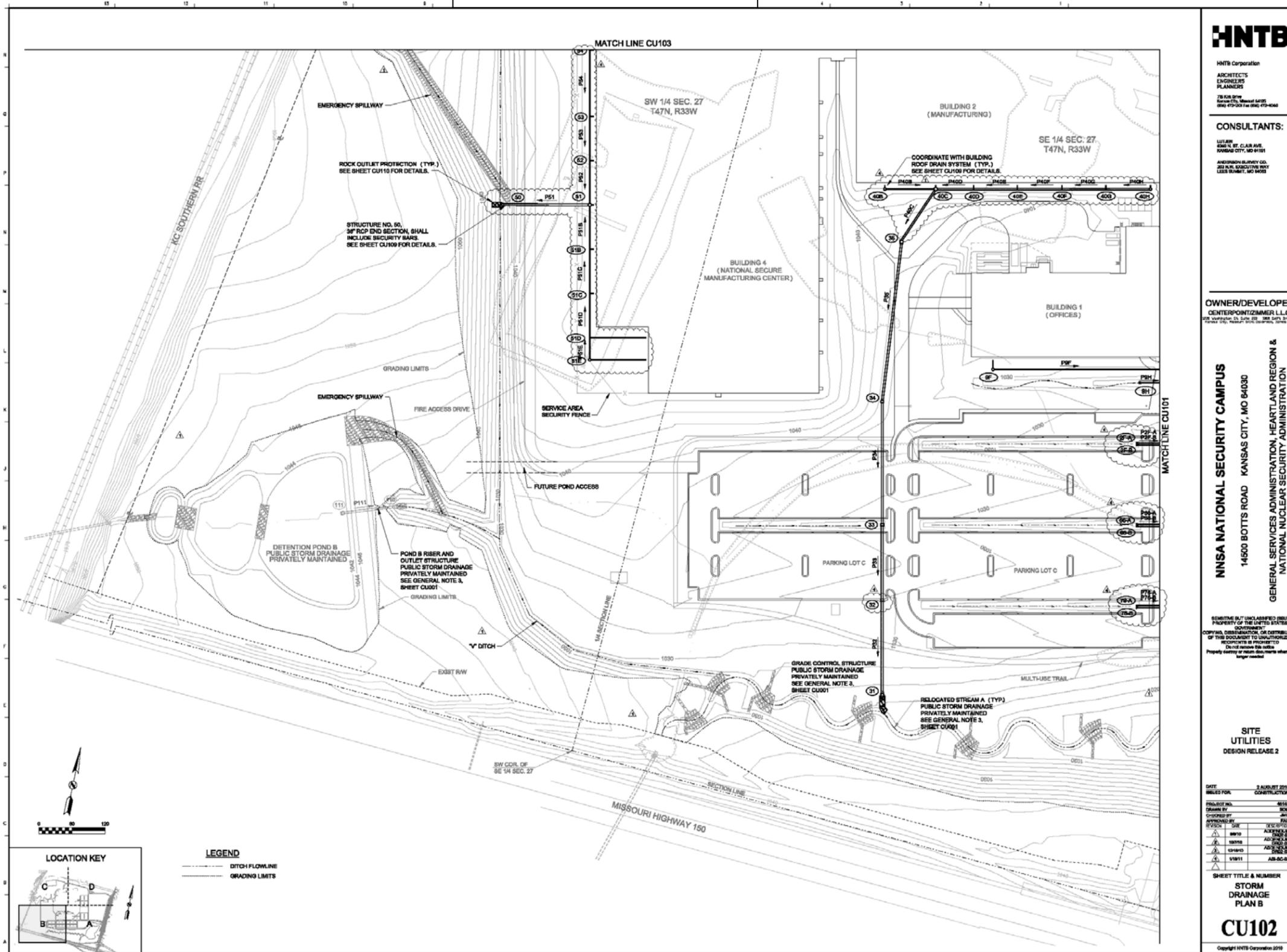
SITE UTILITIES
DESIGN RELEASE 2

DATE	2 AUGUST 2010	
REVISIONS FOR	CONSTRUCTION	
PROJECT NO.	0816	
DRAWN BY	JCM	
CHECKED BY	JCM	
DESIGNED BY	JCM	
REVISIONS	SEE REVISIONS	
NO.	DATE	DESCRIPTION
1	08/10	ADD SHEET
2	08/10	ADD SHEET
3	08/10	ADD SHEET

SHEET TITLE & NUMBER
STORM DRAINAGE PLAN A
CU101

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Figure 3.b Site Storm Water Drainage



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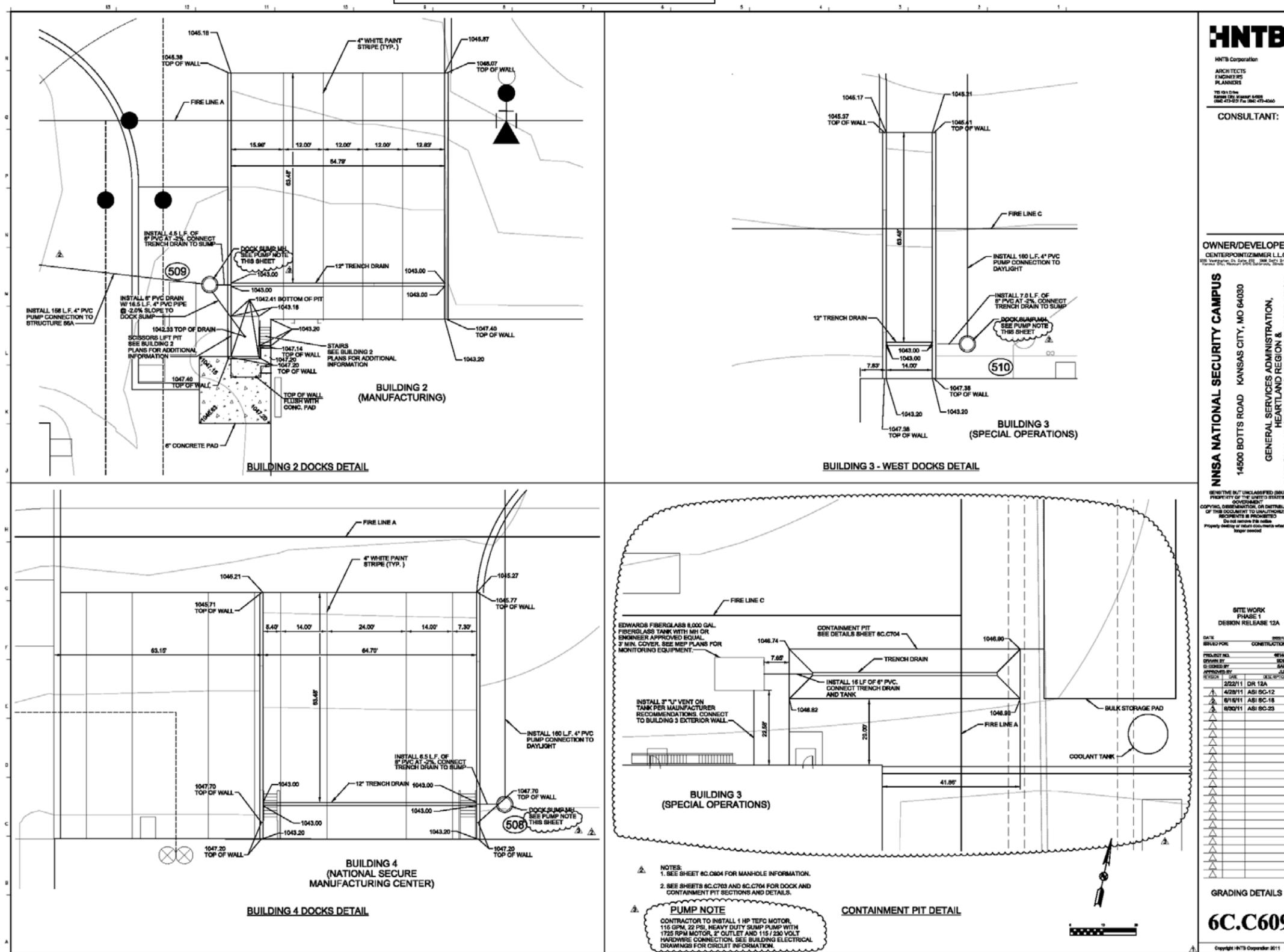
SITE UTILITIES
DESIGN RELEASE 2

DATE	2 AUGUST 2010	
DESIGNED FOR	CONSTRUCTION	
PROJECT NO.	0816	
DRAWN BY	JCM	
CHECKED BY	JCM	
APPROVED BY	JCM	
REVISION	DATE	DESCRIPTION
1	08/10	ADD STORM DRAINAGE
2	08/10	ADD STORM DRAINAGE
3	08/11	ADD STORM DRAINAGE

SHEET TITLE & NUMBER
STORM DRAINAGE PLAN B
CU102

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Figure 4.a. Truck Dock Detail



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CHECKED BY: JSM
APPROVED BY: JSM
REVISIONS: 01 2/22/11 DR 12A
02 4/28/11 ASI 6C-12
03 6/18/11 ASI 6C-16
04 8/20/11 ASI 6C-23

SITE WORK
PHASE 1
DESKON RELEASE 12A

DATE: 08/11

REVISED FOR: CONSTRUCTION

PROJECT NO.: 4618

DRAWN BY: JSM

CHECKED BY: JSM

APPROVED BY: JSM

REVISIONS: 01 2/22/11 DR 12A

02 4/28/11 ASI 6C-12

03 6/18/11 ASI 6C-16

04 8/20/11 ASI 6C-23

05 10/11/11 ASI 6C-23

06 11/15/11 ASI 6C-23

07 12/15/11 ASI 6C-23

08 1/15/12 ASI 6C-23

09 2/15/12 ASI 6C-23

10 3/15/12 ASI 6C-23

11 4/15/12 ASI 6C-23

12 5/15/12 ASI 6C-23

13 6/15/12 ASI 6C-23

14 7/15/12 ASI 6C-23

15 8/15/12 ASI 6C-23

16 9/15/12 ASI 6C-23

17 10/15/12 ASI 6C-23

18 11/15/12 ASI 6C-23

19 12/15/12 ASI 6C-23

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23 4/15/13 ASI 6C-23

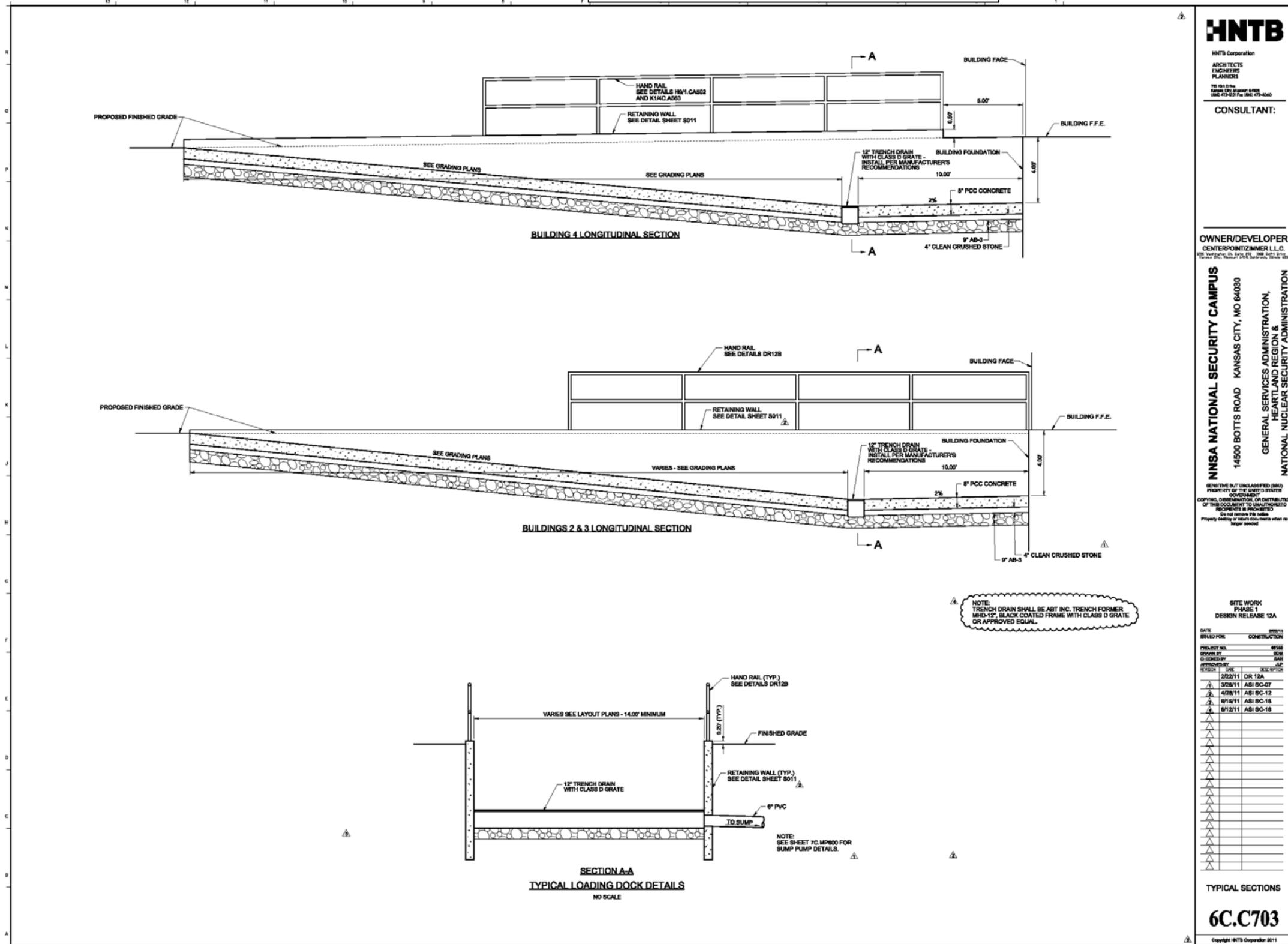
24 5/15/13 ASI 6C-23

25 6/15/13 ASI 6C-23

26 7/15/13 ASI 6C-23

27 8/15/13 ASI 6C-23

Figure 4b - Truck Dock Detail



H:\Projects\11-10-2011\08-42
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 Date: [unreadable]

